

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Recognizes a carbohydrate epitope of SSEA-3 (4, 5).
Source	Monoclonal Rat IgM Clone # MC-631
Purification	IgM-specific Affinity-purified from hybridoma culture supernatant
Immunogen	Four to eight cell stage mouse embryos
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

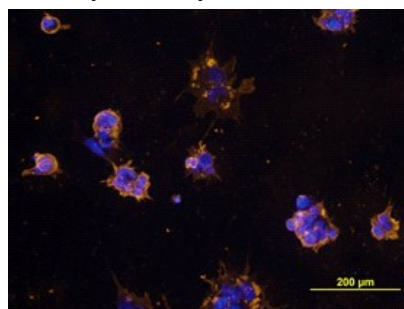
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the [Technical Information](#) section on our website.

	Recommended Concentration	Sample
Flow Cytometry	2.5 µg/10 ⁶ cells	D3 mouse embryonic stem cell line
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



SSEA-3 in BG01V Human Stem Cells. SSEA-3 was detected in immersion fixed non-permeabilized BG01V human embryonic stem cells using Human/Mouse SSEA-3 Monoclonal Antibody (Catalog # MAB1434) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (yellow; Catalog # NL013) and counterstained with DAPI (blue). [View our protocol for Fluorescent ICC Staining of Cells on Coverslips.](#)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

SSEA-3, also known as glycolipid GB5, is expressed on the surface of human teratocarcinoma stem cells (EC), human embryonic germ cells (EG), and human embryonic stem cells (ES) (1). Expression of SSEA-3 is down regulated following differentiation of human EC cells. In contrast, the differentiation of murine EC and ES cells may be accompanied by an increase in SSEA-3 expression (2, 3).

References:

1. Zhou, D. *et al.* (2000) *J. Biol. Chem.* **275**:22631.
2. Thomson, J.A. and J.S. Odorico (2000) *Trends Biotechnol.* **18**:53.
3. Draper, J.S. *et al.* (2002) *J. Anat.* **200**:249.
4. Shevinsky, L.H. *et al.* (1982) *Cell* **30**:697.
5. Kannagi, R. *et al.* (1983) *EMBO J.* **2**:2355.